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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicants : ANTONIUS H. HOLTSLAG et al. Examiner: CUNNINGHAM G.F.

Serial No. : 10/056,362 Group Art Unit: 2676

Filed : January 25, 2002

For : LOCALLY ENHANCING DISPLAY INFORMATION

Board of Patent Appeals and Interferences
United States Patent and Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is an Appeal Brief in the above-identified patent application.

Please charge the fee of $500.00 as indicated on Form No. 2038.

Respectfully submitted,

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CERTIFICATE OF MAILING

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PATENT
Atty. Docket:[MS-151] PHNL010165

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APPEAL BRIEF

Sir:

Appellant herewith respectfully presents its Brief on Appeal as follows:

REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA. Koninklijke Philips Electronics N.V. is the parent company of the assignee of record U.S. Philips Corporation, a Delaware corporation having an office and a place of business at 345 Scarborough Road, Briarcliff Manor, New York, 10510-8001.

RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge and belief, there are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1-16 are pending in this application. Claims 1-16 are rejected in the Final Office Action that mailed January 14, 2005. This rejection was upheld in an Advisory Action that mailed April 14, 2005. Claims 1-16 are the subject of this appeal. A copy of claims 1-16 are presented in Appendix A.

STATUS OF AMENDMENTS

An Amendment after Final Action was filed March 14, 2005 in response to the Final Office Action. The Advisory Action upheld the rejection in response to that amendment. This Appeal Brief is in response to the Final Office Action that rejected Claims 1-16 and the Advisory Action that upheld that rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

A first aspect of the present invention, for example as claimed in independent Claims 1 and 15 relate to a system for enhancing a part of the display information corresponding to an area of a display screen of a display apparatus, as described in the specification such as page 1, lines 1-2 and page 1, lines 22-23. A second aspect of the invention provides a method of locally enhancing display information, for example as claimed in independent claims 11 and 16 and as described in the specification such as page 1, lines 24-25. A third aspect of the present invention provides a computer with provisions for locally enhancing display information, for example as claimed in independent Claim 12 and as described in the specification such as page 1, lines 25-26. A fourth aspect of the present invention provides a display apparatus with provisions for locally enhancing display information, for example as claimed in independent Claim 13 and as described in the specification such as page 1, lines 27-28.

The system, as shown in FIGS. 2-5 of the specification, and as described in the specification such as pages 5-7, includes a computer PC and a monitor MON that includes a display screen DS. A processor PRO, controls a graphics adapter GA to supply display information DI to the display screen DS. The graphics adapter GA also controls a detection circuit DE1 to perform a method, as claimed in independent claim 11, and described below, for supplying a control signal C11 to indicate whether at least one of two criteria (i), (ii) is true in a part of the display screen.

The method of the invention, as claimed in claim 11, includes the step of detecting whether at least one of two criteria is fulfilled for display information being displayed in a portion of the display screen where the first criteria, i.e., criteria (i), relates to the detection of display information comprising an application that is one of a group of applications indicating that non-synthetic

information is displayed, in which the application is not a picture viewer. Non-synthetic information is described in the specification, such as page 2, lines 20-21as photographs or moving video. Examples of applications which fall within the group of applications indicating that non-synthetic information is displayed, and which are not picture viewers, are movie players or other applications for showing video, for example, from a TV tuner card or from a video recorder, camcorder, or digital (video) camera connected to the PC, as described in the specification such as page 2, lines 30-33.

The second criteria, criteria (ii), relates to the detection of display information comprising a file extension that is from a group of file extensions indicating that non-synthetic information is being displayed. Examples of such file extensions are: "jpg", "tiff", "mpg", "mov" and so on, as described in the specification such as page 3, lines 1-4.

The method of the invention further includes the step of enhancing the display information being displayed a portion of the display screen if at least one of criteria (i) or (ii) is found to be true at the detection step.

The system and method of the invention, as claimed in claims 15 and 16, respectively, include a further defined criteria, criteria (iii), that relates to the detection of whether moving information is being displayed, such as are present in movies. In a second embodiment in reply to the Final Office Action of February 19, 2004, independent claims 1, 11 and 12 have been amended to delete "(iii) moving information is displayed". Appellants amended claims 1, 11 and 12 without agreeing and assuming that Application Publication No. 2002/064,764 A1 (Fishman) discloses "video and physical movement corresponding to condition (iii). In the second embodiment in reply to the Final Office Action of February 19, 2004, claims 15 and 16 were added to include condition (iii) for continued prosecution.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1, 9-12, 15 and 16 are anticipated under 35 U.S.C. §102(a) by U.S. Patent No. 6,446,261 B1 to Rosser ("Rosser"). The Appellants respectfully request the Board to address the patentability of independent claims 1, 11, 12, 15 and 16, based on the requirements of Claim 1. This position is provided for the specific purpose and stated purpose of simplifying the current issue on appeal. However, the Appellants herein specifically reserve the right to argue and address the patentability of each of the further claims at a later date should the separately patentable subject matter of those claims at a later date should the separately patentable subject matter of those claims later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of claims 1, 9-12, 15 and 16 is not intended as a waiver of Appellants' right to argue the patentability of the further claims and claim elements at that later time.

ARGUMENT

Claims 1, 9-12, 15 and 16 are said to be unpatentable over Rosser.

The Rosser Patent

The Rosser patent discloses a method and apparatus to act as a live video insertion system (LVIS) split into two functional parts. An upstream, "master" part performs recognition and occlusion mask generation by sending information downstream along with various control parameters, to a less computationally endowed downstream "slave" part, capable of warping inserts to correctly match the current image, and correctly mix the original video, warped insert and occlusion mask. The downstream part is typically a set-top device in a viewer's home. The downstream part includes a viewer usage recorder or monitor, at the viewer location for monitoring television usage patterns and responsively updates a usage profile.

Rosser teaches that because of the location of the set-top device at the viewer's television set, it becomes possible to narrow-cast video insertions to a single household without the need for a central computer sorted data base to store viewer profile factors. Because of the significant memory available in the set-top devices, Rosser utilizes an Anonymous Target Profiling (ATP) process that utilizes the viewer usage recorder or monitor at the viewer location to monitor television usage patterns and stores a continuously updated version of a usage profile, in lieu of a centralized database approach, as is well known in the art.

As described in the Summary of Rosser, in one usage of the invention, a broadcaster establishes a continuous survey of a few thousand households of known profile factors. From the

surveys, a cross-correlation is generated between the viewer usage profiles and the viewer profile factors. Advertisers wishing to have their advertising targeted to viewers with a particular sub-set of profile factors would be able to use the cross-correlations to translate their viewer profile requests into a viewer usage profile request. The broadcaster would then send the required viewer usage profile as part of the broadcast along with the advertisers insertion. At the viewer's set-top, the device would see which insertion was linked to the local viewer usage profile, and insert appropriately.

A. Appelants' first position –

The Examiner's assertion that Rosser teaches detection means for detecting whether at least one of criteria (i) or (ii) is fulfilled for display information being displayed in a portion of the display screen is in error.

With respect to independent claims 1, 11 and 12, Appellants respectfully submit that there is no teaching or suggestion in Rosser of detection means specifically configured for detecting whether at least one of criteria (i) or (ii) is fulfilled for display information being displayed in a portion of the display screen.

Criteria (i) and (ii) are defined in the respective claims as:

(i) an application is one of a group of applications indicating that non-synthetic information is displayed, in which the application is not a picture viewer,

(ii) an extension of a file is one of a group of extensions indicating that non-synthetic information is displayed,

On page 3 of the Final Office Action, the Examiner alleges that Rosser teaches detection means for detecting whether at least one of the criteria (i) or (ii) is satisfied. The Examiner alleges at page 3, lns. 8-9 of the Final Office Action that the terms "viewer usage monitor" and "triggers" both inherently correspond to detection means. The Examiner cites Rosser at Col. 5, lns.7-13 (viewer usage monitor) and 44-48 (triggers) in support of his position.

> Much of the technology needed to implement the **viewer usage monitor**, necessary for Anonymous Target Profiling, could also be used to provide "smart" TV sets, which would favorably impact the economics of implementing the invention by allowing the set-top manufacturers or distributors to offset a substantial part of the cost of the set-top device to the end user.
>
> These additional features may also be used as **triggers** for showing live or still video advertisements, either before or after the feature is used, or as a border advertisement during the use of the feature, or as a live video insertion on some recognized part of the video.

In Rosser, the phrase "viewer usage monitor" may be directed to "detection" in some broad sense, however, it is clearly not directed to the detection of criteria (i) or (ii), as alleged by the Examiner. In the Rosser patent, the viewer usage monitor refers to a device located in the user's set-top configured to detect a user's television usage patterns such as type of programs the user watched, the time of day and week of viewing and so on. Rosser teaches in the Summary and at Col. 3, lns. 45-62:

> The set-top device is an ideal place to locate a viewer usage monitor. In a simple form, the **viewer usage monitor** would classify programs (or channels) and record a rolling viewing profile of viewing habits, including type of program watched, time of day and day of the week of viewing the program and duration of that viewing.[Emphasis Added]

Based on the above, it is therefore shown that the "viewer usage monitor" module of Rosser is not a detection module configured to detect whether at least one of criteria (i) or (ii) is fulfilled for display information being displayed in a portion of the display screen, as recited in Claims 1, 11 and 12 on appeal. Instead, the "viewer usage module" is used as a classification tool for classifying programs (or channels) based on various criteria (e.g., time of day and week).

With regard to the second term "triggers", as cited by the Examiner on page 3 of the Final Office Action, it is respectfully submitted that the phrase "viewer usage monitor" may be directed to "detection" in some broad sense, however, it is clearly not directed to the detection of criteria (i) or (ii), as alleged by the Examiner. Rather, the term "triggers" as used in Rosser is directed to an additional feature provided by a so-called "smart" television set to "trigger" the showing of live or still video advertisements, either before or after the feature is used, or as a border advertisement or live video insertion. In other words, what is being detected is the occurrence of an additional feature (e.g., replay feature) to trigger an advertisement, not criteria (i) or (ii). The features being referred to include, for example, the instant replay feature. For example, a user instantiates the replay feature (i.e., a trigger) and may be shown an advertisement either before or after the replay feature is used.

Rosser teaches at Col. 5, lns. 44-48:

> These additional features may also be used as triggers for showing live or still video advertisements, either before or after the feature is used, or as a border advertisement during the use of the feature, or as a live video insertion on some recognized part of the video. [Emphasis Added]

This passage does not teach or suggest detection means for detecting whether at least one of criteria (i) or (ii) is fulfilled for display information being displayed in a portion of the display screen, as recited in Claims 1, 11 and 12 on appeal.

B. Appelants' second position –

The assertion that Rosser teaches enhancement means for enhancing the display information being displayed in the portion of the display screen if at least one of the criteria (i) or (ii) is true is in error.

The Examiner alleges that Rosser teaches "enhancement means" for enhancing the display information being displayed in the portion of the display screen if at least one of the criteria (i) or (ii) is true.

It is respectfully submitted that based on Appellants' previously stated assertion that Rosser does not teach detection means for detecting whether at least one of criteria (i) or (ii) is fulfilled for display information being displayed in a portion of the display screen is in error, it therefore follows that Rosser cannot teach enhancement means as it is a natural consequence of an affirmative detection of at least one of criteria (i) or (ii) in accordance with the detection means.

In the Final Office Action, the Examiner states at page 3 that the term "magnifyable" as used in Rosser at Col. 5, lns. 24-30, corresponds to "enhancement means".

> Multiple windows would also enable the ability to turn on with predetermined setups more compelling. The warping necessary for the downstream, slave LVIS system, could be used to make one or more of these windows re-sizable, **magnifyable** (for people who wanted to examine some detail of the video) and even rotatable (for people who may want to lie down and have the video on its side as well).

While it is commonly known that magnification is a form or type of enhancement, the Examiner's reasoning falls short of considering the term in its proper context. Specifically, it is respectfully submitted that the above passage does not teach or suggest enhancement means (e.g., magnification) for the purpose of enhancing display information being displayed in the portion of the

display screen if at least one of the criteria (i) or (ii) is true, as recited in Claims 1, 11 and 12 on appeal.

The "enhancement means" (i.e., magnification) taught in Rosser relates to a warping operation whereby the less computationally endowed downstream "slave" part of the two-part LVIS video insertion system (i.e., the set-top) is capable of warping video inserts, performed upstream, to correctly match the current image, and correctly mix the original video, warped insert and occlusion mask. In other words, Rosser teaches that if a broadcaster were to include multiple windows in a "smart" TV application, those multiple windows could be re-sized, magnified, etc., in accordance with warping operations performed by the downstream slave LVIS system (set top). In Rosser, an end user has the option of performing such operations (e.g., magnification, re-sizing, etc.) in one or more of the multiple windows dependent upon the manufacturer including the multiple windows in a "smart" TV application.

In sharp contrast with Rosser, enhancement means is performed in the instant application in the case where the detection of either criteria (i) or (ii) is satisfied in a portion of a display, as recited in Claims 1, 11 and 12 on appeal. This is clearly distinct from a user having the option of performing a magnification or re-sizing enhancement simply by virtue of having available the multiple windows.

In the Advisory Action mailed on April 14, 2005, the Examiner asserts that element (i) refers to non-synthetic information, taken to be video information. The Examiner further asserts that "display information being displayed in a portion of the display screen" corresponds to Rosser's "picture in a picture", which also in itself corresponds to "enhancing the display information being displayed in a portion of the display screen". The Examiner concludes that since both occur together

at the same time via, i.e., "picture in a picture", this satisfies "enhancement means ...if at least one of the criteria (i) or (ii) is satisfied.

Appellants respectfully disagree with the Examiner's allegation. If Appellants understand the Examiner's position, the existence of a "picture in a picture" in a portion of a display screen that displays information consistent with criteria (i) teaches or suggests enhancement means in that they are both displayed simultaneously. Assuming arguendo that "picture in a picture" constitutes a form of enhancement means, the Examiner's reasoning fails for the following reason. It is submitted that a "picture in a picture" presentation of criteria (i) type information is not displayed in Rosser upon satisfaction of the detection of said criteria (i) information, as recited in Claims 1, 11 and 12 on appeal. The fact that both occur together at the same time, as stated in the Advisory Action, is not equivalent to providing enhancement means on the condition that if at least one of criteria (i) or (ii) is satisfied. Clearly, enhancement means is performed strictly as a function of detecting the existence of at least one of criteria (i) or (ii), which is neither taught nor disclosed in Rosser.

CONCLUSION

Claims 1-16 are patentable over Rosser.

Thus the Examiner's rejection of Claims 1-16 should be reversed.

Respectfully submitted,

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Attorney for Applicant

APPENDIX A

CLAIMS ON APPEAL

1. (Previously Presented) A system comprising:

a display information-generating device for generating display information,

a display apparatus having a display screen for displaying the display information,

detection means for detecting whether at least one of the following criteria is fulfilled for display information being displayed in a portion of the display screen:

(i) an application is one of a group of applications indicating that non-synthetic information is displayed, in which the application is not a picture viewer,

(ii) an extension of a file is one of a group of extensions indicating that non-synthetic information is displayed, and

enhancement means for enhancing the display information being displayed in said portion of the display screen if at least one of the criteria (i) and (ii) is true.

2. (Previously Presented) The system as claimed in claim 1, wherein the display information-generating device comprises a computer, the detection means being part of the computer and comprising a suitably programmed microprocessor for detecting whether an application is started on the computer, and for determining whether the application started is one of the group of applications, and/or whether the extension of the file associated with the application is one of the group of extensions, and/or whether moving information is displayed.

3. (Previously Presented) The system as claimed in claim 2, wherein the part of the display information is an active window, and the detection means are suitably programmed to detect whether a window is opened to determine the application associated with the opened window and/or the file extension of the file being displayed in the window from information linked to the window.

4. (Previously Presented) The system as claimed in claim 1, wherein the detection means comprise:

a memory for storing the part or a portion of the part of the display information as first data at a first instant, and

means for comparing the first data with second data corresponding to the part or a portion of the part of the display information at a second, later, instant, to indicate whether a difference between the stored display information and the corresponding display information at the second instant exceeds a limit value.

5. (Cancelled)

6. (Previously Presented) The system as claimed in claim 4, wherein the memory is the video memory of the video adapter of a computer.

7. (Previously Presented) The system as claimed in claim 4, wherein the detection means comprise a suitably programmed microprocessor.

8. (Cancelled)

9. (Previously Presented) The system as claimed in claim 1, wherein the detection means are adapted to supply a control signal to automatically activate the enhancing by the enhancement means if the detection means detects in the part of the display information that at least one of the criteria (i) and (ii) is true.

10. (Previously Presented) The system as claimed in claim 9, wherein the system further comprises input means for receiving user input to supply user information indicating whether the part of the display information should be enhanced or not, and a control means receiving the control signal from the detection means and the user information to supply an adapted control signal to activate or deactivate the enhancing in correspondence with the user input, independent of the automatic detection by the detection means.

11. (Previously Presented) A method of displaying display information on a display screen, the method comprising:

detecting whether at least one of the following criteria is fulfilled for display information being displayed in a portion of the display screen:

(i) an application is one of a group of applications indicating that non-synthetic information is displayed, in which the application is not a picture viewer,

(ii) an extension of a file is one of a group of extensions indicating that non-synthetic information is displayed, and

enhancing the display information being displayed in said portion of the display screen if at least one of the criteria (i) and (ii) is true.

12. (Previously Presented) A computer supplying display information for use in a display apparatus with a display screen, the computer comprising:

detection means for detecting whether at least one of the following criteria is fulfilled for display information being displayed in a portion of the display screen:

(i) an application is one of a group of applications indicating that non-synthetic information is displayed, in which the application is not a picture viewer,

(ii) an extension of a file is one of a group of extensions indicating that non-synthetic information is displayed,

and

means for only providing coordinates for use in the display apparatus if at least one of the criteria (i) and (ii) is true, the coordinates defining said portion of the display screen.

13. (Previously Presented) A display apparatus for displaying display information on a display screen, the display apparatus comprising detection means for deciding whether only a part of the display information corresponding to an area on the display screen has to be enhanced based on a difference value computed between data words corresponding to the area of the display screen to be enhanced at a first instant in time and at a second instant in time, the detection means comprising:

an integrator for determining an intensity value of a line or a sum of lines in the area,

sample-and-hold means for storing the determined intensity value at a first instant, and

a comparator for comparing the stored intensity value with a further intensity value of a line or a sum of lines in the area at a later instant to supply a control signal, indicating whether the difference value between the stored intensity value and the further intensity value exceeds a limit value so that only said part of the display information is enhanced.

14. (Previously Presented) A display apparatus as claimed in claim 13, wherein the display apparatus comprises means for receiving information defining the position of the area.

15. (Previously Presented) A system comprising:

a display information-generating device for generating display information,

a display apparatus having a display screen for displaying the display information,

detection means for detecting whether at least one of the following criteria is fulfilled for display information being displayed in a portion of the display screen:

(i) an application is one of a group of applications indicating that non-synthetic information is displayed, in which the application is not a picture viewer,

(ii) an extension of a file is one of a group of extensions indicating that non-synthetic information is displayed,

(iii) moving information is displayed, and

enhancement means for enhancing said display information being displayed in said portion of the display screen if at least one of the criteria (i), (ii), (iii) is true.

16. (Previously Presented) A method of displaying display information on a display screen, the method comprising:

detecting whether at least one of the following criteria is fulfilled for display information being displayed in a portion of the display screen:

(i) an application is one of a group of applications indicating that non-synthetic information is displayed, in which the application is not a picture viewer,

(ii) an extension of a file is one of a group of extensions indicating that non-synthetic information is displayed,

(iii) moving information is displayed, and

enhancing said display information being displayed in said portion of the display screen if at least one of the criteria (i), (ii), (iii) is true.

17. (New) The system as claimed in claim 15, wherein the detection means comprises:

a memory for storing the part or a portion of the part of the display information as first data at a first instant,

a comparator for comparing the first data with second data corresponding to the part or a portion of the part of the display information at a second, later, instant, to obtain difference values,

means for determining absolute values of the difference values,

summing means for summing the absolute values of the difference values of corresponding data words of the first and the second data to obtain a sum , and

a further comparator for comparing the sum with a limit value.

APPENDIX B

Evidence on Appeal

None

APPENDIX C

Related Proceedings on Appeal

None